IAPI Rec'd PCTIPTO 03 APR 2006

PTO-1390 (Rev. 07-2005) Approved for use through 03/31/2007. OMB 0651-0021

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TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US)

ATTORNEY'S DOCKET NUMBER 30882/40950

U.S. APPLICATION NO. (if known, seep3738FR 1.5) CONCERNING A SUBMISSION UNDER 35 U.S.C. 371 INTERNATIONAL APPLICATION NO. INTERNATIONAL FILING DATE DATE CLAIMED PCT/EP2004/010615 22 September 2004 2 October 2003 TITLE OF INVENTION Spherical or Grain-Shaped Semiconductor Element for use in Solar Cells and Method for Producing the Same; Method for Producing a Solar Cell Comprising Said Semiconductor Element and Solar Cell APPLICANT(S) FOR DO/EO/US Jaques SCHEUTEN, Volker GEYER, and Patrick KAAS Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information: This is a FIRST submission of items concerning a submission under 35 U.S.C. 371. This is a SECOND or SUBSEQUENT submission of items concerning a submission under 35 U.S.C. 371. This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below. The US has been elected (Article 31). A copy of the International Application as filed (35 U.S.C. 371 (c)(2)) Х is attached hereto (required only if not communicated by the International Bureau). has been communicated by the International Bureau. is not required, as the application was filed in the United States Receiving Office (RO/US). An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)). 6. x a.l is attached hereto. х h. has been previously submitted under 35 U.S.C. 154(d)(4). 7. x Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3)) are attached hereto (required only if not communicated by the International Bureau). a. b. have been communicated by the International Bureau. C. have not been made; however, the time limit for making such amendments has NOT expired. d.l have not been made and will not be made. An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)). 9 An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)). 10. An English language translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)). Items 11 to 20 below concern document(s) or information included: An Information Disclosure Statement under 37 CFR 1.97 and 1.98. An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included. 13. A preliminary amendment. x 14. x An Application Data Sheet under 37 CFR 1.76. 15. A substitute specification. 16. A power of attorney and/or change of address letter. 17. A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821 - 1.825. 18. A second copy of the published International Application under 35 U.S.C. 154(d)(4). 19. A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).

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U.S. APPLICATION NO. IT shows beer 312cFF Q5 5 5			INTERNATIONAL APPLICATION NO. PCT/EP2004/010615			ATTORNEYS DOCKET NUMBER 30882/40950			
20. x Other items or information: International Search Report, return receipt postal card									
								•	
The follo	owing fees have	e been submitte	ed			CAL	CULATION	ıs	PTO USEONLY
21. x Basic national fee (37 CFR 1.492(a))							300.0		
22. x Exam If the written opini prepared by IF All other situation	\$	200.0	00						
23. X Search fee (37 CFR 1.492(b)) If the written opinion of the ISA/US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4)							500.0	00	
	TOTAL OF 21, 22		·			\$	1,000.0	00	-
Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing in compliance with 37 CFR 1.821(c) or (e) or computer program listing in an electronic medium) (37 CFR 1.492(j)). The fee is \$250 for each additional 50 sheets of paper or fraction thereof.									
Total Sheets	Extra Sheets		additional 50 or fraction up to a whole number)		RATE				
- 100 =	- 100 = /50 = x \$250.00								<i>F</i>
after the date of c	commencement of	the national stage	e, examination fee, or the (37 CFR 1.492(h)).	e oatl		\$			
CLAIMS	····				RATE		4.050.0	<u> </u>	
Total claim				21 x 50.00		-	1,050.0 200.0	_	
Independent claims 4 - 3 = MULTIPLE DEPENDENT CLAIM(S) (if applicable)		1 × 200.00				200.0	,,,		
TOTAL OF ABOVE CALCULATIONS =							2,250.0	00	
Applicant claims small entity status. See 37 CFR 1.27. Fees above are reduced by ½.									
					SUBTOTAL =	\$	2,250.0	00 ·	
Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(i)).						\$		*	
TOTAL NATIONAL FEE =						\$ 2,250.00			
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property +						\$			
TOTAL FEES ENCLOSED =						\$ 2,250.00		2,250.00	
					refun	Amount to be refunded:			
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		,						9	

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		IAP20 Re	C'd PCT/PTO 03 APR 200
a. X A check in the amount of \$	2,250.00	to cover the above fees is encl	osed.
b. Please charge my Deposit Accou A duplicate copy of this sheet is e		in the amount of \$	to cover the above fees.
c. X The Commissioner is hereby author Account No. 13-2855		e any additional fees which may be rate copy of this sheet is enclosed.	required, or credit any overpayment to Deposit
d. Fees are to be charged to a credi should not be included on this	t card. WARNI form. Provide	ING: Information on this form may credit card information and author	become public. Credit card information zation on PTO-2038
NOTE: Where an appropriate time limit filed an granted to restore the Internation	under 37 CFR	1.495 has not been met, a petition to pending status	on to revive (37 CFR 1.137(a) or (b)) must be
med an granted to restore the internation	ла Аррпсанс	on to pending status.	
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SEND ALL CORRESPONDENCE TO:		SIGNAT	TURE 1
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		<u></u>	James P. Zeller
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10/574633 IAP20 Rec'd PCT/PTO 03 APR 2006 PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Scheuten et al.)	For: SPHERICAL OR GRAIN-SHAPED
)	SEMICONDUCTOR ELEMENT FOR USE
U.S. National Phase of)	IN SOLAR CELLS AND METHOD FOR
PCT/EP2004/010615 filed September)	PRODUCING THE SAME; METHOD FOR
22, 2004)	PRODUCING A SOLAR CELL
)	COMPRISING SAID SEMICONDUCTOR
Filed: Herewith)	ELEMENT AND SOLAR CELL
_)	
•)	Group Art Unit: To be assigned
•)	
-)	Examiner: To be assigned

CERTIFICATION UNDER 37 C.F.R. § 1.10

I hereby certify that the attached eight items (a) through (h) are being deposited with the United States Postal Service on April 3, 2006, in a postage-paid envelope addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 utilizing the "Express Mail Post Office to Addressee" service of the United States Postal Service under Mailing Label No. EV686094936US.

- (a) Transmittal letter to the United States Designated/Elected Office (DO/EO/US) concerning a filing under 35 U.S.C. §371;
- (b) Application as filed;
- (c) Translated application, including eighteen sheets of description, eleven sheets of claims, and two sheet of drawings;
- (d) Application Data Sheet;
- (e) Preliminary Amendment;
- (f) Translation of Article 34 amendments;
- (g) Information Disclosure Statement; and
- (h) International Search Report.

Richard Zimmermann